

Amendments to the Specification

Please replace the paragraph beginning on line 12 of page 19 with the following amended paragraph:

FIG. 6 is a front elevation drawing of ~~block~~ block 125B showing the attachment method of cables 107B1 and 107B2 of cable assembly end portion 121B. Crimp blocks 197B1 and 197B2 crimp the ends of the respective cable loops ~~199B1~~ 198B1 and ~~199B2~~ 198B2 to the respective cables. Cable 107B1 is made slightly longer than cable 107B2 so that tension on cable assembly 107B from the weight of barbell 115 seats crimp block 197B2 against seat 199B2 of block 125B. Due to the longer length of cable 107B1, crimp block 197B1 does not contact seat 199B1, but remains in loose tension due to spacing 201B1. Should cable 107B2 fail under tension, the resulting tension in cable 107B1 of cable assembly 107B will move crimp block 197B1 against seat 199B1, and provide restraining force on further movement of cable 107B1.

Please replace the paragraph beginning on line 1 of page 20 with the following amended paragraph:

Cables 107B1 and 107B2 provide electrical connections for ~~block~~ block 123A and 123B solenoid actuation as shown in the schematic diagram of FIG. 10. Flexible wires 207B1 and 207B2 connect loops ~~199B1~~ 198B1 and ~~199B2~~ 198B2 of cables 107B1 and 107B2 to terminal block 205. The electrical connections 203B1 and 203B2, which may be solder connections or crimp connections, provide a secure electrical connection between cable loops ~~199B1~~ 198B1 and ~~199B2~~ 198B2 and wires 207B1 and 207B2. Seats 199B1 and 199B2 are electrically insulated from each other, for example, by one or both seats made of an electrically insulative material. Construction and operation of block 121A and cable assembly end portion ~~121A~~ 119A is similar.

Please replace the paragraph beginning on line 9 of page 23 with the following amended paragraph:

FIGS. 11A and 11B are top and side elevation views, respectively, of an alternative embodiment of a self-spotting apparatus utilizing a fixed ratchet bar 303A substituted for each of the chain weight-support assemblies of the previous embodiment. Ratchet bar 303A and linear guide 305A are fixed to a support stand in a vertical orientation as shown in FIG. 11B. Linear guide 305A laterally constrains weight-responsive engagement block 307A and allows vertical motion of block 307A as shown by arrow ~~309~~ 308. Cables 107A1 and 107A2 connect the free-weight assembly to block 307A and may be supported by one or more sheaves from the support stand similar to the previous embodiment.

Please replace the paragraph beginning on line 5 of page 28 with the following amended paragraph:

Inner collar 1609 utilizes a drilled passage 1611 for routing lead 1613 of touch sensor 239B between inner setscrew 1615 and outer setscrew 1617 of threaded bore 1619 at connection 1621. Helical spring 1623 provides bias on brush 1603 to make sliding electrical contact with slip ring 1607 and provides electrical contact between inner set screw 1615 and brush 1603. Spring clip 1625 retained by screw 1627 provides electrical contact between slip ring 1607 of support collar 1602 and cable 107B1 at crimp connector ~~1629~~ 1205A.

Please replace the paragraph beginning on line 16 of page 29 with the following amended paragraph:

FIG. 19 is a perspective drawing of stop 1803 and FIG. 20 is an exploded drawing of the stop showing columnar frame 2001, top frame bushing 2003 and bottom frame bushing 2005. Top and bottom frame bushings 2003, 2005 are made of a polymer such as

polyamide to provide a low-friction bearing surface against column 1207. Resilient engagement buttons 2007 of top and bottom bushings 2003, 2005 engage holes 2009 of frame 2001 to secure the bushings to frame 2001. Disengagement or adjustment bar 2011, secured to frame ~~101~~ 2001 by bearing or attachment blocks 2013 and screws 2015, provide bearing surfaces 2017 to allow longitudinal sliding movement 2018 of adjustment bar 2011 with respect to frame 2001. Other disengagement elements such as pivoted bars or levers may be used.

Please replace the paragraph beginning on line 1 of page 30 with the following amended paragraph:

FIG. 21A is an elevation cross sectional drawing of stop 1803 and support column 1207. In this figure, adjustment bar 2011 is depressed, for example by finger or hand pressure in direction 2101, withdrawing pin 2023 against spring 2029 bias. In the withdrawn position, pin 2023 does not engage holes such as holes ~~2017~~ 1217 of column 1207, and stop 1803 is free to move up and down along column 1207 in vertical directions 2103. In the preferred embodiments, stop 1803 forms a sliding clearance with column 1207. Hand grip 2031 has an outwardly extending portion 2032 providing surfaces for raising and lowering stop 1803 and a vertically extending portion 2034 providing a reaction surface for insertion of bar 2011 by a hand.

Please replace the paragraph beginning on line 5 of page 31 with the following amended paragraph:

Actuation of grip sensors 2339A, 2339B by the hands of a user energize respective solenoids 1303 of FIG. 13, disengaging pawl assembly 1215 and allowing weight-responsive engagement assemblies 1203A, 1203B to lower as free-weight bar 2311 is raised by the user. When bar 2311 is lowered by the user, weight-responsive engagement assemblies 1203A, 1203B rise vertically along columns 1207A, 1207B until either the user releases one of the grip sensors 2339A, 2339B as described previously, or the

weight-responsive engagement assemblies contact stops 1203A, 1203B. Bottom surface 2041 of bottom frame bushing 2005 of FIG. 20 provides a bearing surface for retaining upward force from weight-responsive engagement assemblies 1203A, 1203B. Support ledge 2043 engages bottom surface 2045 of frame 2001 to provide support to bearing surface 2041.

Please replace the paragraph beginning on line 18 of page 31 with the following amended paragraph:

Disengagement solenoids (~~2208~~ 2205 of FIG. 22) of stops 2203A, 2203B are energized upon activation of foot switch 2303 by the user. Control unit 2302, powered from ac receptacle 2304 provides control of disengagement solenoids 1303A, 1303B of weight-responsive engagement assemblies 1202A, 1203B and auxiliary stop solenoids 2205A, 2205B. Upon activation of foot switch 2303, stops 2203A, 2203B will fall by gravity to the location of weight-responsive engagement assemblies 1203A, 1203B. Alternatively, stops 2203A, 2203B are adjusted manually by the user by hand grips 2225 of the stops while foot switch 2303 is activated. Electrical connecting cables such as cable 2206 of FIG. 22 may be supported by various cable conduits or supports from the frame (not shown) or run internally through framing members or covers such as weight support assembly covers 2305.